Product Information

Product Name: **Calcein AM** **Catalog No.: 5119** **Batch No.: 1**

IUPAC Name: *N*,*N*'-[[3',6'-Bis(acetyloxy)-oxospiro[isobenzofuran-1-(3*H*),9'-(9*H*)xanthene]-4',5'-diyl]bis(methylene)]bis[*N*-[2-(acetyloxy)methoxy]-2-oxoethyl]glycine 1,1'-bis[(acetyloxy)methyl] ester

Description:

Cell permeable, non fluorescent compound; hydrolyzed by intracellular esterases to become fluorescent calcein in living cells. Used for monitoring cell viability, chemotaxis, cell adhesion and multidrug resistance.

Physical and Chemical Properties:

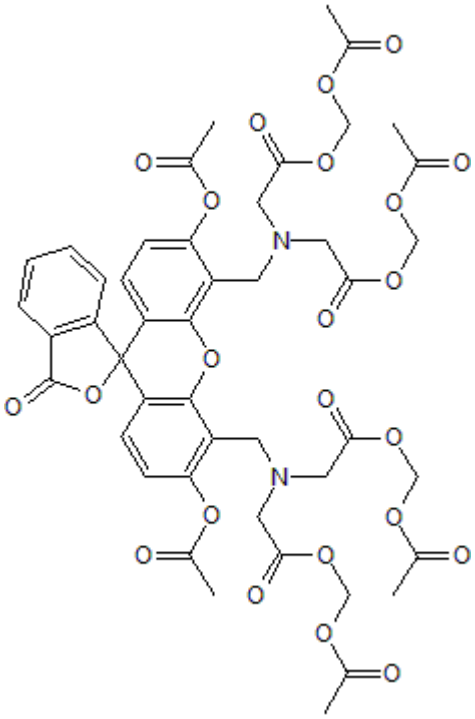
Batch Molecular Formula: $C_{46}H_{46}N_2O_{23}$

Batch Molecular Weight: 994.86

Physical Appearance: White solid

Minimum Purity: >95%

Batch Molecular Structure:



Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

DMSO to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Kuehn *et al* (2011) Prostaglandin E2 activates and utilizes mTORC2 as a central signaling locus for the regulation of mast cell chemotaxis and mediator release. J.Biol.Chem. ***286*** 391. PMID: 20980255.

Lazarowski *et al* (1997) Direct demonstration of mechanically induced release of cellular UTP and its implication for uridine nucleotide receptor activation. J.Biol.Chem. ***272*** 24328. PMID: 9305892.

Bakos *et al* (1996) Membrane topology and glycosylation of the human multidrug resistance-associated protein. J.Biol.Chem. ***271*** 12322. PMID: 8647833.

De Gendt *et al* (1996) The use of calcein acetomethylester (AM)-labelled polymorphonuclear cells in a polycarbonate filter chemotaxis assay. Clin.Chim.Acta. ***249*** 189. PMID: 8737602.